



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,548	11/09/2001	Sylvain De Margerie	38898-0016	5883

7590

04/29/2004

William B. Vass
c/o Ridout & Maybee
Suite 2400
One Queen Street East
Toronto, ON M5C 3B1
CANADA

EXAMINER

ELMORE, REBA I

ART UNIT	PAPER NUMBER
----------	--------------

2187

DATE MAILED: 04/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

70

Office Action Summary

Application No.

09/986,548

Applicant(s)

MARGERIE ET AL.

Examiner

Reba I. Elmore

Art Unit

2187

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-24 are presented for examination.

Drawings

2. The objection to the drawings based on MPEP 37 CRF 1.84 (g) is *withdrawn* due to the amendment.

Specification

3. The objection to the disclosure is *withdrawn* due to the applicant's remarks.
4. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

35 USC 112, 2nd Paragraph

5. The rejection of claim 5 for insufficient antecedent basis is *withdrawn* due to the amendment.

35 USC § 102

6. The rejection of claims 1-24 as being anticipated by Cornelius et al. is *withdrawn*.
7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

8. Claims 1-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Bell et al.

9. Bell teaches the invention (claims 1, 11, 18 and 22) as claimed including a mirrored storage system for transcribing data from a storage consumer, the system comprising:

a primary site and a remote site (e.g., see Figure 1);

a communication link coupling the primary site to the remote site (e.g., see Figures 8-13);

the primary site having an input coupled to the storage consumer for receiving data from the storage consumer with the primary site being the global operations center, GOC, which has connectivity with storage consumers or regional operations centers, ROCs, with the ROCs having storage nodes (e.g., see Figure 8, elements 104, 730, 870 and 802, 803 and 804), and said primary site including a primary controller and a primary storage device as part of the global operations center (e.g., see paragraphs 0052-0053), the controller being operable for transcribing the data received from the storage consumer to the primary storage device, and the controller being operable for transmitting data to the remote site via the communication link as the primary storage being connected to the enterprise or remote sites and able to transmit and receive data across the network (e.g., see Figure 2 and paragraphs 0053-0057);

the remote site having a remote controller and a remote storage device and the remote controller being coupled to the communication link, and the remote controller being operable for receiving data transmitted by the primary controller and transcribing the received data to the remote storage device (e.g., see paragraphs 0059-0060); and,

the communication link comprising a plurality of redundant communication paths, and the primary controller being operable to transmit a copy of the data received from the storage consumer on each of the redundant communication paths (e.g., see paragraphs 0059-0064).

As to claims 2, 12, 19 and 23, Bell teaches the primary controller is operable to generate a data transfer acknowledgement for the storage consumer after transcribing the received data to the primary storage device as typical monitoring and controlling operations (e.g., see paragraphs 0051-0052).

As to claims 3, 14, 20 and 24, Bell teaches the remote controller generates a transaction report for the primary controller after receiving the data transmitted by the primary controller (e.g., see paragraphs 0059-0064).

As to claims 4 and 21, Bell teaches the primary site includes a temporary storage device, the primary controller transcribing the data received from the storage consumer to the temporary storage device (e.g., see paragraphs 0065-0068).

As to claim 5, Bell teaches the primary storage device comprises a permanent storage device (e.g., see Figures 3-5).

As to claims 6, 15, Bell teaches the remote controller reconciles copies of data transmitted by the primary controller and detect errors in any of the copies of data, and in response to detecting an error, issuing an error message for the primary controller as part of the operating systems parameters (e.g., see paragraphs 0077-0080).

As to claims 7, 16-17, Bell teaches the primary controller retransmits the data to the remote site in response to the error message as a response of either Windows or UNIX operating systems (e.g., see paragraph 0075).

As to claim 8, Bell teaches the primary controller generates a data transfer acknowledgement for the storage consumer after transcribing the received data to the primary

storage device as a response of either Windows or UNIX operating systems (e.g., see paragraph 0075).

As to claim 9, Bell teaches the communication link comprises a first communication path and a second communication path, the first and second communication paths being independent of each other as there being a connection and a backup network connection (e.g., see Figure 4, elements 420 and 444).

As to claim 10, Bell teaches the first communication path is oriented in direction opposite to the second communication path (e.g., see Figure 4, elements 420 and 444).

Response to Applicant's Remarks

10. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reba I. Elmore, whose telephone number is (703) 305-9706. The examiner can normally be reached on M-TH from 7:30am to 6:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the art unit supervisor for AU 2187, Donald Sparks, can be reached for general questions concerning this application at (703) 308-1756. Additionally, the official fax phone number for the art unit is (703) 746-7239.

Art Unit: 2187

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Tech Center receptionist whose telephone number is (703) 305-3800/4700.



Reba I. Elmore
Primary Patent Examiner
Art Unit 2187

April 26, 2004